

# ST. BARTHOLOMEW'S



## HOSPITAL JOURNAL

WAR EDITION

Vol. 2

DECEMBER 1st, 1940.

No. 3.

### DOSES

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The first Bart.'s writer declared that logical behaviour was expected of "rational and civilised human beings," and consequently devotees of the Imperial system had no right to regard 5,000,000 as the normal Red Cell count. For them it was 296,000,000 (per minim). The second, who shall be known as Hogarth, in a far wittier letter, considered it strange that patients should imbibe fluids by the mouth in ounces, by the rectum in pints, and intravenously in cubic centimetres. "Urine," continued he, "is commonly voided on hospital charts in *Arabic* ounces, while measurements of sputum and vomit seem to be favoured with the distinction of *Roman* numerals, though also in ounces."

Users of the Imperial system are certainly terrible poachers. They do not scruple to use metric measurements when it suits their purpose, as in determinations of blood-pressure, visual acuity, and scores of other things. But the Apothecaries' system has its advantages, particularly in avoiding fractional doses. It is much easier, for example, to think of 10 grains than 0.6 gramme. And it may be argued that since the British Empire is almost the sole remaining champion of civilisation, the world should adopt the Imperial system rather than *vice versa*.

The Metric system is so nice and tidy. The metre is 1 ten-millionth of the distance between Pole and Equator. One-tenth of a cubic metre is 1 litre, and a litre of water weighs 1 kilogram. All other weights and measures are based on these, and are multiples of ten. Now look at the rival system. The yard is a standard bar of gun-metal, copied from an old yard-measure found in the Tower and legalised in 1824. The gallon contains 10 lbs. (Avoirdupois) of water. The pound (Avoirdupois) weighs 7,000 grains, a grain being the average weight of a well-ripened ear of wheat. The Apothecaries' pound, on the other hand, weighs 5,760 grains. Other weights and measures are based variously on these, and are multiples of almost every number except ten. Moreover, the American Apothecaries' system differs in certain respects from the Imperial. All very Heath Robinson, and totally unscientific.

In theory the Metric system itself is far from perfect. Mathematicians, we are told, often wish that early man had chosen twelve as his numerical base (instead of the number of his fingers) because twelve is divisible by six numbers, whereas ten is only divisible by four. The digits would then have been 1, 2, 3, 4, 5, 6, 7, 8, 9, x, y, 10.

This consideration probably explains why the Babylonian 24-hour day and 60-minute hour survived even the French Revolution. Much could be said for a 10-hour day, with 100 minutes in the hour and 100 seconds in the minute. Perhaps the *Académie des Sciences* were deterred by the fact that the day and the year are (thank Heaven) beyond our control. The thermometer, however, is not, and Fahrenheit's arbitrary scale, in spite of its two advantages, might well be superseded by the Centigrade.

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If all these alterations—metric weights and measures, the Centigrade thermometer, and (let us say) the 24-hour clock—were suddenly imposed upon this country, there would indeed be an appalling upheaval. Not so appalling, though, if introduced gradually and coupled with a metric coinage. This last point is by no means the insuperable difficulty that some people imagine. Here is a practicable scheme, for which I am indebted to a distinguished mathematician:—

[Readers in search of relaxation are advised to proceed no further—if they have reached as far.]

The basic coin will be the *new florin*, containing 25 pence instead of 24, and therefore containing 100 farthings. The old florin and half-crown will be withdrawn from circulation. The shilling, sixpence, threepence, penny, and halfpenny can be retained for many years, but will gradually be superseded by new coins representing 5, 10, 25 and 50 farthings. Names will have to be found for these new coins—an opportunity for the

expression of patriotic or romantic feeling, though there are plenty of old names available (crown, noble, doubloon . . .).

The new Pound will contain 10 new florins, an alteration in value much less significant than when we went off the gold standard. The florin is about the mean of the coinage of other nations, and would be used in quoting foreign exchange. The system outlined here has the tremendous advantage of not upsetting the penny, sixpence and shilling, which are the staple coins for the vast majority of the public.

All this is very mathematical, and quite unlike the usual December editorial. There can be no turning back now, however. The main argument is clear enough. It is that the Apothecaries' system of dosage is mediæval, chaotic and quite unworthy of a scientific profession. A gradual changeover to the Metric system could be conveniently effected by teaching students to use it alone. A start might be made with the next generation. Why not?

We offer heartiest congratulations to Sir d'Arcy Power on his 85th birthday. The G.O.M. has just completed the first supplementary volume of Plarr's *Lives*, and has remained at work in London throughout the bombardment.

\* \* \*

The first volume of the War Edition is now ready for binding. The Exoma Press Ltd. (255, Liverpool Road, London, N.1), is willing to undertake the work. Unfortunately the block of the Henry VIII Gateway, hith-

erto used for the binding case, is no longer available. It is one of the casualties of the Battle of London.

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Mr. A. G. Leacock has been appointed Assistant Editor of the Journal.

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#### *January Issue.*

Contributions for the January issue should be received by the Editor not later than December 13th.

## OPHTHALMIC QUACKS

by E. W. BREWERTON, F.R.C.S.

For the last twenty years ophthalmic quacks have flourished in London surprisingly. Prescribing opticians are not included in this term; they have studied optics and are comparatively harmless.

The ophthalmic quack is a man who promises a cure of practically every chronic ocular ailment if a large sum of money is paid either in one sum before treatment, or

by smaller sums, such as three to six guineas a visit over a course of three months or more, attending two or three times a week.

These quacks may be classified as follows:

1. Those who claim that every abnormal chronic eye condition can be cured by means of glasses.
2. Those who claim to cure similar cases by

other means than glasses, usually electrical.

3. Those who claim to relieve every error of refraction by exercises and maintain that all glasses are unnecessary.
4. The osteopaths, who are always with us, of whom some are prepared to guarantee a cure for puritus ani or detached retina by replacing a displaced cervical vertebra.
5. Finally the psycho-analysts.

Under heading 1. All abnormal chronic eye conditions such as errors of refraction, cataract, optic atrophy or macular degeneration, can be cured by the use of strong magnifying glasses. With these glasses a patient is ordered to read for a certain number of hours daily. Fournier, backed by a well-known Admiral, was the originator of this method, and claimed that the glasses he supplied were of secret manufacture. Fournier flourished for many years and at his death the business was taken over by Wright, who died after a few years of lucrative practice, and was followed promptly by his brother. He did not live long, and now another man has taken on the business. The Admiral who was responsible for booming the Fournier method seemed to have lost all sense of proportion, and wrote testimonials in glowing terms advocating the treatment, and recommending even advanced cases of cataract to go through the cure and promising success.

I have seen a number of cases who have undergone the treatment. One case, a girl of 18 with short-sight, was given for the right eye +6sphere and for the left +8sphere each with 2° prism base in, and told to read with these glasses for 2 hours three times a day, and not to wear her distant glasses even for tennis or sight-seeing. I saw her after 12 months of this treatment, and found her previous glasses, which were 2 dioptries of shortsight, and had been prescribed by an oculist, were still correct; my only surprise was that she was not worse.

I have heard of patients with advanced optic atrophy and very poor vision who were given three different strengths of glasses, all very strong magnifiers, and told to wear glasses constantly, and to persevere with the reading.

The present proprietor of the business had a printed notice displayed in the waiting room to the effect that he had cured the defective sight of a certain Cabinet Minister in the Great War, when London oculists had failed. The Cabinet Minister denied that he had derived any benefit from the treatment.

Under the second heading I have placed those who claim to cure similar cases by other means than glasses, usually electrical.

The chief exponent of this method is a man in Park Lane. He, of course, guarantees a cure, and makes most of his money from cataract cases. There are innumerable people who have a horror of an operation on the eye, and will pay large fees to avoid it. One of my patients was such a person. His father had been operated on by George Critchett for cataract, and had often told his children that he would sooner die than go through the operation again. It must have been done about 1875, and I suppose without any form of anæsthetic. My patient, when told by an oculist that he had advancing cataract, went to the Park Lane professor by the advice of some of his club friends. He was examined with an ophthalmoscope, and a cure was promised. A diagnosis was written on his card: R.E. optic atrophy, L.E. cataract. He was told to attend three times a week, at a fee of six guineas each visit; he attended 30 times and paid 180 guineas. The treatment consisted of the use of a galvanic battery, one pole being passed gently round the margins of the orbit, the other at the back of the neck. This took about 10 minutes, and was given by a lady dressed as a nurse. He seldom saw the professor. His distant vision was recorded about 4/60 in each eye. On every visit the nurse used to glance at his eyes, and tell him he was better, but as he became steadily worse the chair was put nearer to the type to make him believe his vision was improving. He was also given a copy of the same distant type to fix up in his room and told to practise distant vision several times a day.

He told me that there were at least six rooms going in the Park Lane house, and reckoned that, as the place was always full, the professor must be making over fifty thousand a year.

At the end of the treatment he insisted on seeing the proprietor and complained that his vision had deteriorated during treatment. He was told then that this was a very difficult case and another course at the same price was necessary. I need hardly say that this was declined.

Under heading 3 we have those who claim to relieve presbyopia and every error of refraction by exercises, and maintain that all glasses are unnecessary.

These people state that accommodation is not dependent on the ciliary muscle acting

on the lens, but is due to the extrinsic muscles acting on the globe, and all errors of refraction are also due to the same cause; it follows that if these muscles can be strengthened glasses can be discarded. One of their chief arguments in favour of this theory is the fact that after simple cataract extraction some patients are able to read with their distant glasses. This observation is correct, but the condition is rare and only to be found in patients with small pupils, or a small central opening in an opaque capsule with a distant glass of at least +10 dioptries. By drawing the lens a little further from the eye the strength is increased and reading is possible.

Their great leader is Bates of New York, and I think that the following letter from one of his grateful patients will explain the method:—

"Thank you for your letter. The originator of the treatment I am having for my eyes is a Dr. Bates, who was the biggest New York oculist for 10 years, but after making a very great number of experiments, he broke right away from the ordinary methods of treatment and started practising in New York on his own lines, which are quite contrary to the usual methods. He maintains that no one should wear glasses or need wear them. He has cured himself of extreme short sight and undertakes to cure any kind of eye trouble by his treatment. His two great theories are:

1. That the more eyes are used and the more they move the stronger they get, and
2. That light, and especially sunlight, is a cure for all kinds of defective sight.

Mine is old age sight, but my sight is much too old for my age. I already can almost do without glasses at all, but I don't expect to get my sight back perfectly for months or even longer. But they say that once it comes back it never gets bad again.

The percentage of cures in all kinds of defective sight is 90%, and in no case are the eyes made worse or injured in any way, but always improved.

Dr. Bates even cures blindness with his sun treatment."

The exercises consist of blinking frequently; Swinging the body from side to side whilst maintaining fixation on a distant object; Splashing cold water into the eyes 100 times a day; Exposing the eyes to direct sunlight.

There is no doubt that Bates in many cases is very successful in getting young hyperme-

tropes to do without glasses on leaving school. Bates, on seeing a new patient wearing glasses, promptly takes them off, throws them into the wastepaper basket; this, of course, to create a dramatic effect. He invariably promises a cure.

A patient of mine aged 14 with 4 dioptries of myopia was taken to New York for a cure. This was promised and he remained under Bates for 12 months. He was then brought to me again, and of course could not see 6/60; his error was in fact now 4.5D. I asked the boy what he thought of Bates' treatment, and without hesitation he said he considered it a damned swindle.

On the other hand a large number of Americans used to wear black-rimmed glasses as a fashion, and it is not surprising if many of these were wearing glasses unnecessarily. Bates, of course, can always cure such people and they in return send him glowing testimonials.

A few years ago at a Moorfields Hospital dinner, Vice-Admiral Gaskell asked that something should be done to prevent these quacks from obtaining high fees on account of boys with defective sight being unable to pass the physical entrance examination at Dartmouth. On discovery of the defect the boy is taken to a quack as a last resource, who for a fee of 50 guineas or more promises a cure. The boy attends two or three times a week for electrical, or other, treatment, and invariably fails.

Lastly we come to psycho-analysis as a cure for all abnormal eye conditions. When a qualified medical man leaves the ordinary path of medicine and claims to cure all eye lesions by psycho-analysis, we are justified in calling him a quack.

There is a well-known oculist who now practises psycho-analysis on his eye patients. A discharged naval Commander came to me suffering from severe irido-cyclitis in both eyes with secondary glaucoma and commencing cataract accompanied by gross joint lesions. The psycho-analyst had seen this patient and promised a cure by psycho-analysis, but as the patient had already spent many months in Netley Hospital and had some general idea of chronic toxæmia, the treatment offered was declined.

I am hoping that the above notes may enable medical men in general practice to dissuade their patients from wasting their money by going to these quacks. The attraction is the promise of cure, as Bernard Shaw pointed out in the "Doctor's Dilemma."



## TWO EPIGRAMS

*On the remnant of an incendiary bomb which penetrated through the roof of a hospital in London and is now used as a rest for pens.*

One day I whistled through the air  
And nearly set the place a-flare,  
But doctors smothered me with sand  
And now to rest their pens I stand.  
Could pens prescribe a lasting balm  
Of peace, they'd win the highest palm  
Of victory.

*On the remnant of an incendiary bomb which one night in September, 1940, fell on to a block of London flats where I sleep, and now serves as a rest for pipes.*

One night I whistled through the air  
And tried to set the roof a-flare,  
But porters smothered me with sand.  
So now to rest their pipes I stand.  
From bombs of war to pipes of peace!  
Real peace! How else can hatred cease?  
F. PARKES WEBER.

## BOMBS ON BART'S\*

## An Interim Report

by CHARLES HARRIS.

IT would look like tempting providence to write an account of what has happened to the Hospital up to a certain date for a Journal to be published some weeks later. What follows may well be out of date by the time this article is in print. Yet the risk of this seems worth taking for the sake of those Bart's men and women who are away from the Hospital and whose sole source of information has been a press notice that yet another Hospital in Central London has been bombed, or a series of distorted rumours coming to them by word of mouth.

While writing this I am touching wood hard, for all things considered, the Hospital has up till now suffered very little and its ability to treat patients has been in no way impaired. The bare facts of the effect of aerial warfare up to date are these. On the night, the date of which is still shrouded in secrecy, a high explosive bomb burst in Little Britain and did damage to the Nurses' Home. Twelve nights later a high explosive bomb fell and went off in or over the Anatomical Theatre. On certain occasions incendiary bombs have fallen in the Hospital, quickly to be dealt with. Roofing glass is lost from time to time from falling fragments of anti-aircraft shells.

The two main incidents have been the bombing near the Nurses' Home and the

bomb in the lecture theatres. The first exploded in Little Britain and made a crater in the street which broke the water main and the gas main, igniting the latter. It blew down the boundary wall above the Nurses' Home area, blew in the windows and window frames of the adjacent rooms in the basement and ground floor and threw much debris from the road into these rooms. Nurses were sleeping in the basement and there were fourteen in the room most severely damaged. Providentially, none was seriously hurt. The members of the nursing staff behaved admirably as everyone would expect. Their shelters had to be evacuated. This was done in an orderly manner, without fuss, and without anyone showing distress. Apart from the partial destruction of several rooms, the basement was made temporarily uninhabitable by the inflow of water from the burst water main. The work of tidying up, annoying enough in itself, was made rather more difficult by the water. Our attempts to get the water main turned off and the gas main extinguished led to a variety of not unamusing incidents. These feats were eventually accomplished after the passage of some hours. After certain repair work has been done, the rooms damaged in this explosion will again be habitable. The main structure of the Nurses' Home has not been impaired.

\* This article has been withheld by the Censor until now.—Ed.

## OUR CANDID CAMERA



Sic8Transit

The second main incident, although rather more spectacular, caused even less disturbance to hospital arrangements. The bomb must have fallen and exploded just above the passageway leading from the slope to the A.R. and the Surgery. The Anatomical Theatre was completely demolished and lies a mass of ruins where the passageway was. Half the roof of the Medical and Surgical Theatre is lying on the bottom of the Theatre. All the buildings above the Anatomical Theatre lie as rubble. These include some of the preparation rooms for the Museum, the old Biology Department which has become, in the last ten years, the Photographic Department, and the rest of the rooms to the north of the staircase leading up from the Library. Access to the Cloak Room doors is blocked by debris, as are the stairs leading down. Apart from broken windows the Cloak Room is not materially damaged. The windows of the Library have been blown through into the

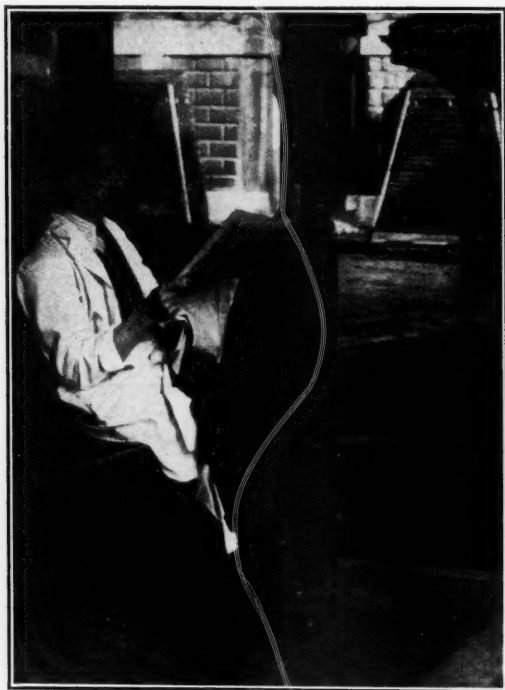
street but the glazed doors to the bookshelves have not been broken. A similar fate has overtaken the room above, now the Morbid Histology Laboratory and remembered by some as the Practical Physiology Room. Many windows in the Museum were broken and some disturbance of the structure has taken place. The more valuable specimens had been removed, and of the remainder only about fifteen were ruined. The secondary effects of the explosion led to breaking of the windows in the T.N.I., in the Surgery, in Medical and Surgical Out-Patients, and the rooms above. The rooms used by Miss Ball's Department were completely demolished by falling debris. The opinion has been expressed by the irresponsible that the part of the hospital destroyed was long overdue for demolition and had Goering been under contract he could hardly have accomplished the feat more efficiently and with less general disturbance.

One of the redeeming features in this

incident was the fact that those sleeping under the West Wing and those sleeping in the basement of the Old Anatomy Department were not harmed. Much inconvenience both to patients and to members of the Medical College has been caused by this explosion. Until the windows in the Out-

Patient block are made weatherproof it has been necessary to discontinue using this block. The basement surgery under the new Surgical Block is taking the extra strain, though nobody would pretend it is convenient.

The destruction of the two Lecture



. . . Gloria Mundi.

Theatres and the damage to the Morbid Histology Laboratory, which was used as a lecture theatre, have left us without any lecture theatre on the Hospital site. Again, the more cheerful souls may regard this as a blessing. However, they should not laugh too early, as there are still five lecture theatres intact in the Medical College, Charterhouse Square, and the Morbid Histology Theatre will not take long to set right. Out-Patient teaching is, to say the least of it, rather cramped when conducted in the rifle range, or in what used to be a coal cellar under the West Wing. This again is not a state of affairs that need continue when the glass in the Out-patient Depart-

ment is made safe. Certain things of sentimental value have disappeared. I have not yet been able to find Bridle's room; Paget's lecture table lies squashed below the roof of the Medical and Surgical Theatre; the Greek inscription above the slope has been salvaged in three pieces and somewhat bent.

The foregoing is intended as a bald account of what has happened so far. Lest it should seem in any way depressing to those who have no immediate access to the Hospital, it should be added that the Bart's people at the Hospital are not changed at all, and, judging by these experiences, it will take a very great deal more before their customary equanimity is disturbed.



THE DEVELOPMENT OF BLOOD TRANSFUSION (*Continued*)

by ERIC C. O. JEWESBURY, B.M., M.R.C.P.

## II. STORED BLOOD.

WITH the establishment of reliable methods of transfusion, interest began to develop in the possibility of using other than freshly drawn blood from living donors. In Russia the use of corpse blood was investigated and adopted. In the United States the system of "blood banks" of stored blood was introduced, and in Canada work was instituted to determine the value of placental blood. More recently the preservation of separated plasma and serum has assumed great importance.

*Corpse Blood.*

The first experimental work on corpse blood was carried out in 1927 by Professor Shamov, of Kharkov, in an attempt to transfer tissues from the dead animal to the living. He showed that blood obtained from dogs after death could be injected, even in large quantities into living dogs without any signs of toxicity. He communicated his success to Professor Yudin who had charge of some 8,000 to 10,000 emergency cases every year at the Central Emergency Hospital in Moscow. Many of the patients were brought there late at night in need of urgent transfusion and many were dead on arrival or shortly afterwards. Yudin believed that the fatal cases could provide a large supply of blood for transfusion for the others.

For a whole eighteen months he pondered the question, but at last his opportunity came. This is best described in Yudin's own graphic language:—

"When, on March 23rd, 1930, I was called out to the receiving room and shown a young engineer who had severed the blood vessels at the elbow in an attempt to commit suicide, I saw that there I had the conditions that I desired. He was dying of acute anæmia, but otherwise he was a strong, robust man. At that same time, in the receiving room lay also the corpse of a sixty-year-old man who had died six hours previously from a fractured base due to being knocked down by an omnibus. The blood of the old man was of the same group as that of the young engineer. Lastly, my moral responsibility in the event of failure would have been minimal, in that the patient himself had courted death. I ordered the corpse of the old man to be transferred to a laboratory, whither a nurse and assistants were summoned. Having painted the

abdomen with iodine, I performed a laparotomy and widely exposed the vena cava. I managed to obtain 120-130 c.c. of blood at once, after which the vein became quite flat, and I had to wait for a fresh accumulation of blood. . . . Altogether 420 c.c. of cadaver blood had been collected, when I was told that the would-be suicide was almost at the point of death and that we should have to hurry with the transfusion. We quickly repaired to the operating room, whither the dying man had been transferred."

The transfusion was successfully carried out, no reactions or complications occurred, and the patient was discharged fully recovered. Moreover the autopsy on the body of the old man showed no trace of any transmissible disease.

Yudin soon afterwards carried out further transfusions of corpse blood with equal success, and a little later, chance contrived another set of circumstances which carried him a stage further. For the first transfusions the blood was collected into bottles containing 4% sodium citrate solution, and this citrated blood was used either immediately or within a few hours. One night a blood transfusion was urgently needed for a patient with intestinal hæmorrhage, but no suitable donor could be found. About half a litre of unused citrated cadaver blood had been placed in the refrigerator three days' previously, and Yudin decided to make use of this discarded blood. Again the transfusion was successful and the patient recovered. Thus the use of stored, as well as fresh, human cadaveric blood became a practical possibility and thereafter Yudin began to store cadaver blood of all groups, keeping it with citrate in a refrigerator.

The removal of blood is now regularly carried out within six to eight hours of death, the corpse being placed in a high Trendelenberg position. The blood is withdrawn through a cannula tied into the internal jugular vein, and the average yield is stated to be about 2 litres. As a rule it is transfused into a patient within 10 days of collection, although it has been used after three to four weeks.

In the first 200 transfusions of cadaver blood sodium citrate was used to prevent coagulation. One day, however, Dr. Skundina (Professor Yudin's woman assistant) noticed that uncitrated blood drawn for Wassermann tests from people who had died

a sudden death, quickly coagulated to form a clot and then reliquefied of its own accord in  $\frac{1}{4}$  to  $1\frac{1}{2}$  hours. (Skundina and Rusakov, 1934.) This spontaneous liquefaction did not occur in blood from people who had died after a long illness. It was at once realised that from many corpses there could be obtained a supply of blood which did not require the addition of any anticoagulant. Fresh and stored cadaveric blood of this kind was thereafter used with excellent results, and since 1935 over 2,000 transfusions of uncitrated corpse blood have been given in Moscow.

The nature of this spontaneous liquefaction or fibrinolysis which occurs in the blood of those who die suddenly is not understood; it has occasionally been seen in severely injured and shocked patients who are still alive. To be able to preserve and transfuse pure blood without any added anticoagulant solution has been a great advantage and the reaction rate among Yudin's patients fell from 20% to 5% after pure blood was introduced.

Clearly, the practicability of producing a regular supply of such uncitrated corpse blood depends upon a high peace-time rate of violent or sudden deaths and an absence or disregard of public sentiment—neither of them conditions likely to be attained in this country.

The work on cadaver blood has, however, been of particular value for the light it has thrown on the possibilities of storing blood at a low temperature until it is required for use. This has led to the practice of storing blood from living donors, and in the U.S.S.R. today all the large hospitals use stored blood almost to the exclusion of freshly drawn blood, the professional donors simply attending a Central Institute for its collection. Most of these donors are women and they are allowed a minimum of six weeks between each service. (Riddell, 1939.)

#### *Blood Banks.*

In the United States, where stored blood has come to be widely used, this difficulty has been overcome by the establishment of the "blood-bank" system. The first blood-bank was started at the Cook County Hospital in Chicago in 1937, and since then similar banks have been organized at a number of other large hospitals in the country, notably the Philadelphia General Hospital and the Los Angeles County Hospital.

The principle of the blood-bank is that it

works on the exchange system. Blood is contributed to the bank by every hospital service that may require it. This blood may come from patients who have been venesected for therapeutic purposes (e.g. those with heart failure or polycythæmia) or it may come from relatives and friends of patients transfused or from professional donors. It is collected into citrate solution and sent for refrigeration, accompanied by two pilot tubes of samples of blood, the one citrated for grouping and compatibility tests on the cells, and the other uncitrated for Wassermann and other tests on the serum.

When a blood transfusion has to be done, the house officer of the service applies to the "bank-cashier" (or laboratory technician) for blood of the required group. The actual bottle supplied by the bank is probably not one that has been contributed by the service that uses it, but it is debited to their account and must be replaced by another bottle of blood, though not necessarily of the same group. Under such a system, blood of any group is available at any time from the bank and this is replaced afterwards by bleeding a volunteer who need not be the same blood group as the patient.

I had the opportunity of seeing the blood-bank system working very efficiently at the Pennsylvania Hospital in 1939. Some notes and instructions issued in the hospital are of interest in showing how perfectly the system is grasped by the business-like American mind. Part reads as follows:—

"Unlike the assets of a commercial bank, which can be exchanged or converted into different forms and which bear interest, those of the blood 'bank' are subject to deterioration, cannot be exchanged, and do not multiply. Therefore, the following conditions regarding credits must be imposed.

"Each service throughout the hospital is entitled to withdraw blood from the bank if credit has been established. Each flask containing 250 c.c. of blood which is satisfactory (neither Wassermann, Kahn or Eagle positive nor coagulated) will be considered a unit of credit for a period no longer than 10 days . . .

"Credit may be extended to a service in an emergency if suitable blood is available in the bank, on condition that a satisfactory balance is established by that service within 72 hours. Further credits cannot be extended if the deficit is not promptly repaid . . . Credit balances for each service are to be posted weekly."

At the Cook County Hospital during the first year of operation of the blood-bank, 962 transfusions of preserved blood were given, the blood used being up to 21 days old, though usually it was discarded after 10 days. There were 130 reactions after the transfusion (13.5%) none of which was severe.

At the Philadelphia General Hospital, after experience of the first 1,000 transfusions of stored blood the reaction rate was 7.4%. The average flask of blood remained in the refrigerator for 5 days before use, but no increase in frequency of reactions was noticed in the case of blood that had been kept for two or three weeks. Cultures of the blood, as at other blood-banks, were consistently negative. 11% of the specimens were not used.

Although the blood-bank is of great value in many urgent cases, its operation is obviously restricted to large hospitals where some five or six transfusions are normally being carried out every day.

#### *Placental Blood.*

The possibility of using blood from the human placenta has recently been considered. Goodall and others (1938), in Montreal, first pointed out its value as an inexhaustible source of supply. Moreover, placental blood has a higher red cell content than has adult blood, and its hæmostatic power is greater. Goodall and his colleagues claim to collect an average 125 c.c. of blood from each placenta, and they do not consider that contamination of any consequence is likely to occur.

Howkins and Brewer (1939), however, were unable to obtain more than an average of 47 c.c. from the placenta, and they found that out of fifty samples of placental blood collected for transfusion, 22% were contaminated with air-borne or genital tract organisms.

Such contamination may or may not be of importance when the blood is stored at low temperatures, but the small yield of blood from the placenta and the necessity for mixing a number of specimens in order to provide an adequate amount for transfusion are disadvantages which weigh against this source of supply.

#### *Wartime Supplies.*

The tragic necessities of war have in the last few years shown the value of preserved blood. It is impossible, in the fire of the front line, or in the havoc after a big air raid, to organise on the spot immediate and

extensive venepunctures of volunteer blood donors in order to supply the urgent needs of the seriously wounded. Stored blood has been an immense asset in the solution of this problem. In the Spanish Civil War it was used most extensively and its worth was proved. A transfusion centre was organised at Barcelona in 1936, the donors being civilians, principally women. From each of the 4,500 donors 300 to 400 c.c. of blood was taken every three or four weeks. During the first year 1,200 litres of blood was thus made available to be sent to the front either by lorries or by special cars equipped with electrical refrigerators.

In Madrid another large blood-store was instituted. Group O and Group A donors supplied up to 500 c.c. every three weeks, and the Madrid Blood Transfusion Institute reported the use of 400 litres of preserved blood each month, and as many as 100 transfusions in a day. Blood was collected into a tenth part of 3.8% sodium citrate solution and kept for three weeks, if necessary, in a refrigerator at 1 or 2° C.

On the Insurgent side twenty similar transfusion centres were organized and the results, published in bulletins from both armies, were equally satisfactory.

Jorda (1939), has described the apparatus and methods used in the Barcelona Service. Among the new procedures introduced was the mixing of all bloods of the same group. "Our experience of thousands of transfusions," he writes, "has amply confirmed the value of our technique . . . The mixture of bloods results in a very homogeneous blood (biologically speaking) with a normal quantity of cells, hæmoglobin, glucose, urea and other constituents, and the product of the mixture of several bloods tends to approximate more nearly to ideal blood . . . Bloods with strong agglutinins are also rendered innocuous, since they are mixed with bloods with weak agglutinins . . . and the danger of inverse agglutination is thus removed."

The maximum time that the blood was kept was 18 days, and although both group O and group A donors were bled at first, the collection of group A blood was eventually almost given up owing to its limited use. This was because front-line doctors, who were often inexperienced in testing blood groups, did not care to take the responsibility of classifying the wounded men for fear of giving an incompatible transfusion which might have fatal results. The

suggestion, therefore, arises that members of the services should have their blood groups tested and recorded as a routine upon their identity cards.

The experience of air-raid casualties in the Spanish Civil War showed that at least 10% of the wounded required a blood transfusion and, with this in mind, as the international situation in 1939 deteriorated, a scheme was organized for enrolling volunteer blood donors on a large scale in this country. Four depots were established around London and these were responsible for the withdrawal, storage, and rapid distribution of blood to the areas allotted to them. This scheme is organized for the Government by the Medical Research Council, and similar independent depots have been established to provide for the needs of towns outside the London area.

Volunteer donors are asked to fill in a form on which they state whether they are in good health and whether they have suffered from any serious illnesses. Provided that the donor is fit, of average build and not anæmic, the removal of a pint of blood will do him no harm. It is important to exclude any volunteers who might transmit either syphilis or malaria, for both these diseases have been conveyed by blood transfusion.

Since Fordyce (1915) first reported the transmission of syphilis by blood transfusion, it has been customary never to transfuse blood showing a positive Wassermann reaction. Live spirochaetes, however, are not found in the blood in tertiary syphilis (except sometimes during pregnancy) and, therefore, a positive Wassermann reaction or a history of syphilis from the donor does not necessarily mean that the blood is infectious. In almost all the reported instances where infection is known to have been transmitted by blood transfusion the donors were in the primary or secondary stage of the disease. McCluskie (1939) has recently described the transmission of syphilis by a donor who was in the pre-chancere stage at the time of transfusion and whose blood W.R. was then still negative. Furthermore, both animal experiments and observations on human subjects have supported the view that, even though the blood W.R. be positive, infection does not occur if the disease is in the latent or inactive state. McNamara, in 1925, transfused 10 non-syphilitic patients with blood from 6 syphilitic donors. The donors (who were Jamaican negroes) all had positive W.R.'s but were in the late stage of the

disease. None of the recipients developed either clinical syphilis or a positive W.R.

One may, therefore, reasonably conclude from these and similar experiments that it is the stage of the disease, rather than the Wassermann reaction which governs infectivity, and that people with chronic tertiary syphilis are unlikely to transmit syphilis by blood transfusion.

Malaria stands in rather a different category from syphilis, since in most cases where malaria has been transmitted by blood transfusion the donor has been a carrier of a latent infection, and has been unaware that he has ever suffered from the disease. Apparent complete recovery from the condition is no safeguard, as shown by a case of transfusion malaria reported from a hospital in New York, where the donor (father) gave a history of malaria forty years before, with no recurrences. Any prospective blood-donors who have had malaria or even lived in malarial districts are, therefore, best rejected from service.

It may be that the temperature at which stored blood is kept is low enough to destroy any spirochaetes or malarial parasites contained in it. Of this, however, evidence is required.

Although the voluntary principle, as opposed to professionalism, is a good one amongst blood donors, this country is the only one (apart from pre-War Holland and Denmark) to have adopted it on a large scale. The British Red Cross Society during the last twenty years organised a blood transfusion service in London and sixty provincial centres, whereby it was possible for a hospital to obtain, at short notice, the service of a volunteer donor of any blood group. At the outbreak of the war there were about 3,000 volunteers on the list, and some 700 calls were being answered every month in London alone. This very admirable service contrasts favourably with the professional system in other countries whereby a donor may be some £5 the richer for parting with a pint of blood, which is more likely to convey disease, and whose provision is sometimes accompanied by deception or extortion.

The experience of the now disrupted Red Cross organisation was invaluable in the establishment of the war-time depots which sprang into being in September, 1939. During the comparatively quiet period during the first year of the war the civilian hospitals came to rely more and more upon the blood



which was collected and stored at these depots, and which was so easily available for their needs. In that first year the North Eastern London Depot enrolled some 16,000 volunteer donors and about a thousand bottles of stored blood were used from its stock.

The Army Blood Transfusion Service also established a depot in this country at the outbreak of the present war, and blood was flown to France and Flanders for the use of the B.E.F. When the Battle of France began, the Army Blood Supply Depot rapidly sent out extra supplies so that within a few days each of the eight teams attached to casualty clearing stations had received some 60—80 pints of blood and a small amount of plasma. One casualty clearing station was made an advanced blood store, provided with extra quantities of blood and given transport so that it could distribute blood, when required, to other casualty clearing stations (Maycock, 1940). The blood was stocked in mobile refrigerators, and some 300—400 pints were used between May 10th and the evacuation from Dunkirk.

The use of cannulae for giving the blood was required in surprisingly few instances—13% at one casualty clearing station and 2% at another—although large quantities of blood were given to single patients. Cannulae were of value during aerial bombardment when movements and restlessness resulted amongst the wounded.

The transfusion officers were in all cases satisfied with the results obtained in suitable patients and the incidence of reactions following the administration of stored blood was negligible. The age of the blood used was up to three weeks as a rule, though in an extreme instance blood bottled seven weeks previously was given successfully. The importance of treating severely wounded men early was very evident.

Experience showed that transport over appalling roads seemed to have little effect on the blood, and that "a transfusion could be given in absolutely any circumstances except in a vehicle."

Strictly accurate comparison of the relative merits of stored blood and fresh blood for transfusion is exceedingly difficult. Unless all the comparisons are made by the same

observer or by individuals employing exactly the same technique, and unless all the patients are in a comparable clinical state, and receive comparable amounts of blood, the results, particularly of a relatively small number of transfusions, are apt to be misleading.

From the experience gained so far it can, however, be reasonably maintained that the administration of preserved blood is clinically satisfactory in cases of acute hæmorrhage with or without shock, and in chronic secondary anæmia. For certain other diseases of the hæmopoietic system, and for cases of anæmia associated with sepsis, the administration of fresh blood is probably to be preferred.

The ready availability of stored blood is its great advantage, particularly in an emergency, and this outweighs any slightly smaller rise of hæmoglobin percentage in the recipient that has been said to occur when the results are compared with those of fresh blood. In the absence of blood volume estimations, however, even these comparisons are open to question.

Transfusion reactions occur after the administration of stored blood just as they do after the use of fresh blood. Such experience as we have does not suggest that there is any striking difference between these reaction rates.

The length of time that blood can be kept before transfusion is also doubtful. Since degenerative changes in the cells progress continuously it is clear that the earlier the blood is used the better. On this account an arbitrary limit of three weeks storage is suggested, but in many instances this limit has been much exceeded without ill-effect.

Fortunately, however, there is now much less need to attempt to preserve emergency supplies of whole blood for long periods of time. This gain is due to a development which will be discussed next month, namely the introduction of transfusions of preserved plasma and serum.

*(To be concluded.)*

#### CORRECTION.

A sentence which was mis-printed in the previous article should have read as follows:—

"Thus group O subjects have both anti-A and anti-B (or so-called *alpha* and *beta*) agglutinins in their serum, group A subjects have *beta*, group B have *alpha*, and group AB have neither agglutinins in their serum."

Owing to printing difficulties, the Greek symbols have been spelt in entirety!

#### EDITOR'S NOTE

Authors are entitled to three complimentary copies of the number in which their work appears, but will only receive them on application. If

reprints of an article are required, they are asked to send the order before the date of publication of the number in which it appears.



## THE ROLL OF HONOUR.

The following awards for gallantry are announced :—

*O.B.E. (Military Division)*: Temp. Lieut. (temp. Lieut.-Col.) R. O. Ward, D.S.O., M.C., T.D., F.R.C.S., R.A.M.C.

*M.B.E. (Military Division)*: Temp. Lieut. E. B. Brennan, R.A.M.C.

### WOUNDED.

Dalley, G. (Lt., R.A.M.C.)

Burrow, K. C. (Lt., R.A.M.C.)

Kerr, A. K. (Lt., R.A.M.C.)

### PRISONERS OF WAR.

Stoker, G. E. (Lt., R.A.M.C.)

Dearlove, A. R. (Lt., R.A.M.C.)

Mellor, A. W. C. (Lt., R.A.M.C.)

Barber, S. W. (Major, R.A.M.C.)

Rose, I. F. (Lt., R.A.M.C.)

Wooding, J. E. (Lt., R.A.M.C.)

## OBITUARY

WALTER GEORGE SPENCER,  
O.B.E., M.S., F.R.C.S.

Probably there are not many men at Bart.'s who remember Mr. Spencer (who died on October 29th), for he was 82 years of age and for some years had been in retirement.

Mr. Spencer qualified in 1885, having gained the Junior and Senior Scholarships, as well as the Lawrence Scholarship with gold medal. He held the appointment of House Surgeon with us and then started research work with Sir Victor Horsley at the Brown Institute. The Westminster Hospital was fortunate in securing his services, for he worked faithfully for it from the day he was appointed Assistant Surgeon in 1887 until his death. Public service attracted Mr. Spencer as much or more than private practice and a large portion of his time was devoted to the wider problems of his profession. The University of London, where he was a member of Senate, the Royal College of Surgeons of which he was a Vice-President, the Royal Society of Medicine, and the London Library were some of the many activities which bene-

fited from his energy and experience.

A steady single-minded man, he pursued his way undisturbed by criticism, provided he was persuaded that he was doing the right thing. His publications were numerous but he will be remembered rather for a successful text book of Surgery which he inherited from Mr. Walsham and which he enlarged and revised.

In the long twilight of his life he gained solace in translating the works of Celsus for the Loeb Library. It is a fine piece of work and establishes him at once as a classical scholar. It was hoped that he would be able to do for Galen what he had done for Celsus but now, alas, that task is left to another pen.

Spencer married a Sister at St. Bartholomew's Hospital, Miss Elizabeth Charlton. There were two children, a son and a daughter. The daughter took up Medicine and qualified but she died while holding an appointment as House Officer at Charing Cross Hospital.

G. E. G.

## LONDON INCIDENT

It is 10.15, a clear moonlight night, and we are expecting a heavy raid. In the Post, the wardens are reading the evening papers, or indulging in rather stupid badinage. Outside, the guns fire spasmodically as the bombers fly over. Two of our wardens are patrolling the area.

Suddenly, a tearing noise begins overhead. We look at each other as the noise changes to a crescendo whine, but the whine dies away in the distance, and we hear two muffled crashes. The ground shakes a little.

"Outside our area, anyway. Probably North in Kensington."

"I thought they fell across the river—but you can only guess, when you're in a building."

We return to our newspapers. The humorist of the Post makes a poor joke. There is some uneasy laughter, but he doesn't try again.

The uneven drone of the enemy plane gets louder; the guns are silent for a few seconds.

Much louder this time, the noise of the bomb quickly changes to a scream. We hurriedly reach for our tin hats, but before we can put them on, the explosion shakes the Post and we feel the pressure of the blast.

"Fielding and Andrews, you go out."

Hurriedly I sling my gas mask over my shoulder, adjust the strap of my tin hat and grab a torch. We run outside, seize our bicycles, and as we get on Andrews says:

"That was in our area, anyway."

"Bet you a shilling it wasn't."

"O.K."

We cycle furiously, without lights, down Redon Place, and turn right into Queen's Road.

"There it is!" Andrews shouts from ahead.

A cloud of dust is drifting northwards across Queen's Road. The bicycle wheels bump over bricks and debris in the road. So the "Blue Boar" has got it.

The front of the building is still standing. Two men are trying to break down the locked door into the saloon bar. Andrews helps them, and I try another door which looks easier. Thank God it's after closing time — there won't be many casualties. Inside, a woman is screaming and sobbing, "Get us out, quickly! Get us out of here!"

I charge at the door again; the lock breaks, but the way is blocked by fallen beams. Someone comes to help, and together we shift a beam and crawl through. The wrecked bar

is filled with dust, and reeks of alcohol from the broken bottles. As we get inside, the dust chokes us and we cough violently. The woman is standing among the broken tables, in her petticoat. She grabs my arm and pushes me to the top of some stairs:

"They're down there!"

"How many?"

But I don't wait for an answer. Scrambling down the staircase, my torch is useless in the thick dust and I fall over a door which lies on the stairs. I'm too excited to curse, as I pick myself up. Luckily my torch is unbroken.

Another woman, some of her clothes torn off, is screaming and laughing alternately.

"Give me that torch!" a man's voice, urgent in the darkness.

I give it to him, and lead the hysterical woman to the foot of the stairs. Some other wardens are coming down.

I find the man who has my torch, in a corner of the cellar, putting on his trousers: I am suddenly furious:

"You damned fool! People are dying here, and all you do is dress yourself."

Faint, hardly human cries are coming from the other end of the basement, where it is open to the sky. I stumble towards the sound and climb on to a pile of wreckage. My torch lights up a woman's hat, a torn book, pieces of crockery and a tumbled mass of masonry and wood. Suddenly I realise that the cries are coming from under my feet. Other men come to help, and with bare hands we shift lumps of masonry, bricks and wood. It seems incredible that anything should be alive under all this. As we work, I curse the Germans.

A woman's hand sticks out from the mass, covered in dust, with a little blood. The pulse is beating, and we work quickly, knowing she may be suffocating. More debris is pulled away, and slowly the woman's body is uncovered. She is unconscious, but still living. Two men carry her outside.

Nearby, a man is working feverishly on the huge pile. I go to help him, and he looks up.

"Mr. Gunn and his wife were sleeping just here, by the kitchen stove."

We hear people walking heavily on what is left of the floor above our heads. Bricks fall from a wall which is leaning crazily inwards. A beam moves, then crashes in front of us, and I expect the whole floor to collapse. Mercifully it holds. We all scream

abuse at the fools. I ask a man to keep everyone away from the room above us.

We go on digging, and come to thick dust, which we scrape away with our hands. My hands touch something soft, but it is only a mattress. Then a woman's face is uncovered. A doctor comes over to us, DR in luminous paint on his tin hat. He feels a pulse in her cheek:

"Still living, but the pulse is very feeble."

He puts two fingers down her throat:

"It's solid with dust. There's no hope for her."

The rescue squad has just arrived, and I leave them on the job.

Andrews is on the pavement outside, helping with the survivors. I look at my watch—a quarter to eleven—only twenty minutes since the bomb fell.

As we ride back to the Post, shell splinters are falling—rattling on the roofs, and striking sparks as they hit the roadway.

"You owe me a shilling," says Andrews.

Overhead the moon is calm and untroubled, among the quiet stars.

A. G. L.

## NIGHT

Voices in the mist  
Whispers straying idly in the night  
Among the heavy overtones of war  
Drift from spires that glow without a light  
And domes who are the home  
Of right and law.

The voices whisper warmly in the dark  
Wandering proudly round the ancient place.  
They whisper hate is stale as love itself  
And these and other things  
Death does deface.

I. E. D. M.

## TWO YEARS COME NEXT MUCK SPREADIN'

When the hospital engineer and I were walking past the Nurses' Home, a tall pile of sandbags, tired after thirteen months of protecting a window of the ward opposite, sagged in the middle, lurched outwards and fell with a thud across the road. Sandbags everywhere in the grounds were doing this all day, disillusioned after more than a year of expectant blast-proofness. The Senior Physician to the hospital, surveying his car which peeped coyly from under ten tons of disillusioned sandbag, had aptly said: "Something *must* be done."

The nurses, agilely scrambling up sandy hill and down sandy dale before claiming their four meals daily, had taken up the cry. "Something *should* be done," they said.

So I paused before climbing this new barricade. "It would be nice if something *were* done," I said pointedly to the engineer. He, too, stood and stared at the pile that blocked the road.

"Yes," he said. "Something *shall* be done."

"I think it's very important," I said, "because if we have any ambulances in to-night and if they have their usual curiosity and drive right round the hospital once before they go away again, they'll stick on this mess.

Unless, of course, they happen to be American drivers. But these English women haven't even got the strength to put on a handbrake before running into the Porters' Lodge, let alone to lift their vehicle over all these bags."

"Just what I was thinking," said the engineer. "But to-day is Saturday afternoon, so I haven't got any men to clear it away. Now, if you like to go and get a shovel and a cart, I'll pay you one and twopence an hour to shift this sand on to the flower beds: and think what a lot of money one and twopence an hour is."

The engineer was a Scot of sorts. We argued for a quarter of an hour and at one and threepence and a farthing I gave way; Bachelors of Arts, I said, were usually paid at half a guinea an hour because their minds had been so highly educated. The engineer said one and threepence farthing was his final offer; that he was unable to use my highly educated mind at the time, but that, as he was a generous man, he would allow me to keep it and to use it myself while I shovelled sand.

I was generous, too. I went away and changed my clothes. I fetched a shovel. I

trundled a tin truck like a Boy Scout's trek-cart to the place between the Nurses' Home and the wards. And I started to shovel. There was a whole mountain of sand to be moved and it seemed to grow bigger every minute. I went on and on shovelling. At last the over-filled cart tumbled backwards and upset.

"I'm sleeping!" shouted a night-nurse from a window of the Nurses' Home as the cart hit the ground with a crash of steel. The handle hit me beneath the chin. I was in no mood for idle gossip.

"You're a liar!" I shouted back with a frankness which shocked me later. "You're wide awake."

I shovelled the sand back into the cart again.

"Wotcher doin', sonny?" enquired one of the pensioner gardeners. He chased a leaf round the grounds with a broom all day from Monday to Friday; fascinated with his work, he must have forgotten that it was Saturday. He leant back opulently on his broom and contemplated me as I sweated.

"Wotcher doin', sonny?" he asked again and I knew that although he wouldn't understand it, he was determined to have an answer.

"I am working," I said grandly; but a passing Matron spoiled the effect. "Don't work too hard," she said, "We can't have you laid up, you know."

The pensioner spat and moved off in the train of his leaf.

My cart was full once more. I pushed it away to a flower bed. There was a crackling of small and valuable twigs as I upset it backwards. This flower bed was a shrubbery and I had covered it with several tons of sand; probably someone thought very highly of the shrubbery, so I withdrew rapidly and went on with my shovelling.

"Shovelling sand?" asked a nurse as she went into the Nurses' Home. Actually I was sitting on the tarmac dusting my hair. Sand is ubiquitous, clinging stuff.

"Yes," I answered. "I am shovelling sand."

"Still shovelling sand?" she enquired as she came out of the Home five minutes later. This time I was shaking sand out of my rubber boots.

"Yes," I answered. "I am still shovelling sand. I have just shovelled some into my boots."

Then I became obsessed with the idea that there must be some great thought, a moral, to be gleaned from this sandy mess. I thought desperately hard while I filled a second truck.

Here was a vast sandy scene of desolation, unrivalled in Hitler's biggest dreams of an African Empire. For half an hour I mixed with material as a stimulus to thought. As any manual worker knows, who has shovelled sand, sooner or later a corporeal itch develops: after a major intellectual crisis I achieved an epigram—"Time flies; sand fleas"—yet that, even that, didn't seem adequate as a great thought.

I dragged the second cart away to empty it. After ten yards of precarious progress it tipped over backwards with a clank as loud as the earlier one. This time I clung to the handle. I was borne upwards and there I dangled in the air. Two maids came to stare. Arm in arm they tittered and giggled. Indeterminately, I still dangled. "Gwarn," said one maid, "you arsk 'im." I knew what they were going to ask me. There are no new ideas among hospital maids. They were going to ask me if I was barmy. I was in no position to bandy words with maid-servants. I lowered myself to the ground and the maids moved on.

I righted the cart. I shovelled back the sand into it. I emptied it out again on the cabbage patch. Although it was almost dark I began to fill the cart for a third time. I was sick of sand. I ached enthusiastically.

The hospital engineer came to see if I had finished.

"Give me my money," I clamoured in the darkness. "Give me my money and let me go." I had justly earned three shillings and ninepence three.

"Give you your money?" said the engineer in a voice as black as the night. "Give you your money? And what about this filthy mess you've made? The shrubbery ruined, the cabbage patch submerged . . . and less than a quarter of the sand shifted and all my men gone home. I'll give you your money! Yes, I'll give you your money—two years come next muck-spreadin' . . ."

I was more than sick of sand; I was sicker of Scotsmen. I tilted my truck over backwards and sand splashed the engineer. I flung my shovel to the ground with gusto. My aches disappeared. I was on strike. I ran to my quarters. I seized a towel. The engineer's footsteps were close behind me. I dashed to the bathroom. I locked the door. "And when are you going to finish and clear up that mess?" howled a voice through the keyhole.

"Two years come next muck-spreadin'," I bellowed back as I turned on the taps.

## CAMBRIDGE NEWS

The following letter has been received:

10th Nov., 1940.

The Editor,  
*Bart's Journal*.  
Dear Sir,

The technical hitch referred to in the October issue of the Journal as an excuse for the absence of news from Cambridge appears to have developed into a serious breakdown, and it seems highly desirable that repair work should be carried out at this end of the broadcasting system. Up to the present I have not succeeded in finding a suitable correspondent among our preclinical students, but I hope to do so in the near future.

During my association with the Students' Union, and the Publication Committee of the Journal, I have not failed to learn and indeed the Editorial Board has quite rightly not been allowed to forget, that the Journal belongs to the Students' Union. It is with much hesitation, therefore, that I am sending the attached brief account of student life amongst the Bart's community in Cambridge, but until I find some member of our student body willing to take on this onerous task, the only way in which I can fulfill my recent promise to you is by writing an article myself. The attached account will, I hope, prove to be my first and last effort as a special correspondent from the Cambridge front.

Yours faithfully,  
A. WORMALL.

The absence of news from this front might conceivably have recalled the earlier war communications from the Maginot Line and might have led your readers to assume that a purely defensive action is being fought here; nothing is further from the truth. To our credit we have several very solid achievements, and we hope there is little or nothing on the debit side. Cambridge has certainly become aware of the existence of a lively and progressive Bart's Medical College, with active and successful rugby, hockey, soccer, athletics, rowing and fencing clubs. The 46-week year experiment, involving the compression of the work of five terms into an almost continuous session of 12 months, was undoubtedly a success, and amongst other achievements is the acquisition of a reputation for enjoyable and financially profitable dances.

July and September were unusually busy months. Those 46 weekers who had not fallen by the wayside, and many stragglers from previous examinations, worked hard for the September 2nd M.B. Examination, with the constant fear that the long promised invasion might seriously interfere with our September time-table. The enemy, those abroad and the examiners at home, were not unkind, and 19 of the 26 candidates of the 46-week class passed the whole of the 2nd M.B. There was no lowering of the standard for these candidates and this pioneer group is to be congratulated on completing in twelve months a course of anatomy, biochemistry and physiology which usually requires at least 18 months. Another 40 of this group are taking the forthcoming December Examination and those who are successful will have reduced the normal

course of study at least three months. This 46-week year emergency scheme has now been discontinued by the University of London, and the normal and less intensive courses allow more opportunity for general reading, recreation and service in the Home Guard.

The rugby, hockey and soccer clubs have all started this season very well and have won all their matches (4, 4, and 2 respectively) up to the time of going to press. The enthusiasm for rugby is such that two teams can often be raised for a trial game when other opponents are not available. The hockey club has recently succeeded in persuading the Cambridge University Hockey Club to grant them a fixture on condition that our side shall be diluted with a few players of other London Colleges and that it will masquerade as a London University team; it seems probable that our run of success at hockey will cease with this game next Saturday, but it is only fair to point out that this is not the view of our hockey enthusiasts. The rowing club has three crews in training and in this section also there is a splendid spirit of optimism. The swimming club, which was one of the most active organizations last session, has been unable to function so far this term owing to the lack of suitable bathing facilities, and the athletic club is also dormant, mainly because of the loss of M. A. C. Dowling, one of the successful 46-weekers. Both these clubs, as well as the cricket, tennis and squash clubs, will flourish again when the occasion arises.

The rugby game between our Hospital XV and Cambridge was more interesting and more even than the score of 26-4 would suggest. Life in bombed areas is evidently not the ideal training for a keen rugby



match, and with a few weeks' rest in the comparatively peaceful atmosphere of Cambridge and possibly strengthened by the addition of two or three pre-clinicals, the side would stand a much better chance of extending the Cambridge XV. A. R. Corbett, the preclinical rugger secretary, played for the Hospital side at short notice and, encouraged by enthusiastic vocal efforts from our many supporters, he put in some sterling work.

An account of the very successful dance held in Cambridge at the end of October is given below. As a result of this effort, I. P.

Todd, the Secretary of the Dance Committee, was able to send the very useful sum of £46 12s. 6d. to the Dean as a contribution to the Hospital Funds.

One other item of special interest is the election of Professor Hopwood to an Honorary Fellowship of Queens' College. This honour, which will give great pleasure to every member of our College from the Dean to the first-year fresher, is a tribute to Vice-Dean, and also an indication of the very friendly relationship which exists between Queens' and our own College.

### CAMBRIDGE DANCES

The latest Bart's dance on October 26th was a greater success than any previous one.

Besides a large crowd of Bart's students and a sprinkling of staff, many Cambridge undergraduates contributed their high spirits.

The hospital colours were predominant in the decorations of the Ballroom. Great credit must be given to the Stewards, who certainly know how to "run" a dance. From a dancer's point of view it was very wise of them to limit the tickets to 450 (not including the apparently inevitable gate-crashers) instead of the larger number of previous occasions. Various forms of refreshment were provided, so that, whatever the state of the bar, the floor was never too crowded. Both bands were excellent.

Whether the next Bart's dance is in aid of Bart's or a Spitfire Fund, there will be no difficulty in selling tickets!

### PRE-CLINICAL RUGGER,

Wed., Oct. 30th, v. Corpus Christi and Selwyn Colleges. Result—Won 33-0 (3 goals, 6 tries).

The Bart's side were vastly superior from beginning to end, and had little difficulty in amassing a large score, which, however, might have been even bigger had the place kicking maintained the high standard of the rest of the play. R. F. Jones at right centre had a field day, and scored four tries, a reward he richly deserved for an excellent afternoon's play. Ballantyne ran hard on the left wing, and tackled furiously in defence. Amongst the forwards Corbett gave a display reminiscent of "Tubby" Anderson at his best, and was well backed up by Todd, Wood and Vickery.

Tries were scored by Jones, R. F. (4), Corbett (2), Todd (2) and Vickery, and the goals kicked by Jones, A. (2) and Hunt.

TEAM—R. N. Austin, P. T. Ballantyne, G. L. Bourne, R. F. Jones, J. C. L. Adams, J. T. Brady, M. R. Hunt, H. G. W. Cooke, I. P. Todd, P. D. Moyes, A. Jones, G. M. Vickery, A. B. Wood, J. G. Hadfield, A. R. Corbett.

M. R. H.

### SOCCER,

In our first game versus a combined team of Jesus and Trinity Hall we started off in grand style, netting no fewer than four times in the first half without reply. One of these goals was a particularly fine effort by centre forward Adams, who from the halfway line executed a solo run and

ended by flashing in a drive which gave the goalkeeper no chance. The other goals were scored by Barker at inside right, and D'Arcy Laidlaw at left wing. Adams again netted before the whistle went for half-time.

The second half contained something in the nature of a shock for Bart's as the opponents had the ball in the net three times within about ten minutes. This was achieved by some good work by their halves and finished off with some accurate shooting by the forwards. These goals, however, spurred our side on to greater efforts and our centre half Atteridge, by scoring a grand goal, made it 5-3 in our favour and thus finished a most enjoyable game.

Our game against Westminster College last Saturday was played in conditions more suitable to water polo than soccer. The pitch was swept by a very strong gale and the players drenched to the skin by incessant rain. Unfortunately we had the wind against us in the first half and our defence was hard pressed to keep the opposing forwards at bay. The defence held out, however, and in addition, our forwards in one lightning raid on the other goal managed to pass the goalkeeper. From a very fine centre from our right wing, Hunt, Adams put the finishing touch. One goal up at half-time against the strong wind was very encouraging.

The second half provided our forwards with countless opportunities and had they taken the chances they were given, we should have had a double figure score. However, we managed to add three more goals to our first half score and finished comfortable winners by four goals to nil. The goal scorers were Adams and Barker (2).

L. C.

### AND HOCKEY

October 19th. Bart's v. Magdalene. Home. Won 8-1.

The season started well with an excellent match resulting in a victory for Bart's. The whole team showed the makings of a first-class side. The forwards exhibited great promise by their ability to combine well and press home their attack. Goals were scored by Goodbody, Johnston and Mehta.

Team: Rassim; Thompson, Hopwood; Fyfe, Todd, Chopra; Sankey, Johnston, Goodbody, Mehta and Ballantine.

October 23rd. **Bart's v. Kings.** Away. Won 8-0.

Owing to King's failing to produce a full side, I. R. Haire was transferred to make the numbers even. Nevertheless, Bart's had no difficulty in defeating their opponents mainly due to outstanding play by Ballantine, who scored 5 goals. Goals were also scored by Fyfe, Helps and Todd; the rest of the team maintained the standards previously shown.

Team: Rassim; Thompson, Ridge; Fyfe, Todd; Sankey, Helps, Ballantine, Mehta and Chopra.

Oct. 30th. **Bart's v. St. Catherine's.** Home.

Won 6-1.

St. Catherine's arrived with two men short, so we lent them Chopra. For the first quarter of an hour both sides seemed evenly matched in spite of a very good goal by Mehta. Then the forwards got together and raised the score to 5-0 by half-time. In the second half Bart's only managed to

score once more. Todd and Thompson, who were outstanding in their play, prevented St. Catherine's from scoring more than one goal. Goals scored by Goodbody (2), Mehta (2), Ballantine and Routh.

TEAM—Rassim; Hopwood, Thompson; Fyfe, Todd (C); Routh, Goodbody, Ballantine, Mehta, Sankey.

Nov. 2nd. **Bart's v. St. John's.** Home. Won 6-1.

Rain throughout the afternoon did not stop the match. St. John's were two men short and Bart's only one; so Bart's, having the advantage of an extra man, pushed home their attack. At half-time Ballantine, Goodbody and Johnston had each scored. In the second half Goodbody scored another three goals. A return match with full teams and a fine day should make an excellent match.

TEAM—Rassim; Hopwood, Thompson; Fyfe, Todds (C.); Sankey, Johnston, Goodbody, Ballantine, Chopra.

## HILL END NEWS

These remarks are dedicated to those who have not visited Hill End every week-end to enjoy the rural delights of Hertfordshire. However, our shrapnel-spattered friends are always welcome here. With Friday night "prunes" suspended the week-ends may not be so attractive, but we hope to have these "prunes" going in full swing when the upper atmosphere quietsens.

Present social activities include the following:—Mixed hockey is played every Wednesday, and is competing well against Rugger. So many potential Rugger players are playing hockey that, it is rumoured, the 10 oz. secretary of Rugger may start mixed Rugger as a counter-attraction.

The orchestra hopes to get organised as soon as the double bass turns up. Dramatic committees and sub-committees meet every night in most of the pubs of St. Albans, so we have been told.

The well-meant efforts of the Choral Society penetrate to the uttermost ends of the Hospital each Wednesday evening.

Apart from these, countryside rambles and bar-propping still have their following.

The Stooges of Stodge Hall, so called because they watch the air by day and the hospital's many passages by night, are celebrating the accomplishment of the "New Deal." This consists of admission to the revered precincts of the Hotel Splendide where the Stooges share in the evening feast.

The student community, reinforced by some 46 men from Cambridge, is now larger than ever before. Those of us who do not live in do A.R.P. duty for 24 hours, once in three weeks. This entails sleeping on mattresses and playing innumerable quiet rubbers of bridge in the A.R.

Then there is the Home Guard. In its prime it included in its ranks some 40 students. There are now somewhat less but they make up for that with keenness. The warriors may be seen at dusk rushing "up the Spout" or at opening time in the Mile House. Their more pacific brethren watch with some trepidation the alarming way in which they sprout new weapons or equipment every week.

A. H. W. B.  
L. S. C.

## ORCHESTRA,

An Orchestra is beginning to form itself at Hill End, composed of a number of enthusiastic nurses and students. For a time the old Musical Society slept, and this represents its resurrection under the Presidency of Dr. Boame. The procuring of music took a few days to arrange, but they are now learning Hadyn's Symphony No. 104. It promises well, but there is still a regrettable shortage of instrumentalists capable of playing the more peculiar machines, such as bassoons and oboes.

H. W. B.

## CHORUS,

With pleasing co-operation from the nursing staff, it has been possible once again to form a chorus, and rehearsals are now a twice-weekly feature of our night life. So far, they have been enthusiastic, if not always very musical, but we have certainly enjoyed ourselves, even if it has been at the expense of some patients' sleep.

Most of our time now is being spent in rehearsing for a recital of Christmas Carols which we hope to give in the Reception Hall on Sunday, December 22nd, at 2.30 p.m. The proceeds, in the form of a silver collection, will be given to a local charity. Your support, both in presence and cash, will be welcome.

J. K. I.

## AND GRAMOPHONE

The corridors of Hill End resound with the voices of students and nurses alike asking when dances and gramophone recitals are to be resumed. Black-out arrangements in the Reception Hall are such, however, that it becomes necessary to extinguish the lights and lock the doors immediately the siren sounds in an attempt to deprive enemy bombers of what is possibly the most effective beacon provided for them in Hertfordshire.

It is sincerely to be hoped that, before long, effective measures will be taken to make the Reception Hall available during black-out hours so that entertainment and culture may once again flourish at Hill End.

A. G. H.

### DRAMATIC SECTION

Under the chairmanship of Dr. Cullinan, the Drama at Hill End is very much alive. Every week we gather for readings of plays by Shakespeare. As an experiment one week members were asked to read any verse or prose of their own choosing and the result was highly entertaining and not a little surprising. At the present moment, however, all attention is focussed on the forthcoming Christmas show. This will consist of a Revue and is due to take place on January 2nd, 3rd and 4th.

One very pleasing feature to the Dramatic Section at this time, is the increase in numbers, particularly in the number of the nursing staff, in fact to such an extent that the students are now outnumbered by about three to one (not an altogether unsatisfactory state of affairs).

If all the latent talent can find its way to the surface we can hope for a very successful season.

H. H. B.

### RÉSUMÉ OF THE CRICKET SEASON

Hill End cricket in 1940 suffered a severe setback when at the end of June some seven or eight of our regular players departed to other spheres of medical life. Gallimore then took over the captaincy, and, after a shaky start we settled down, ending up with a record of eight won, nine lost, and two drawn matches.

Apart from R. M. Mason and Gallimore there were no really dependable bats in the side but each in his own individual manner (and some of them very individual) had his own little day on one or more occasions; Tudor and Durham, besides the two already mentioned, each scored fifties during the season.

Our bowling strength was greatly assisted by the efforts of Sergeant Jim Nash of the R.A.M.C., and by Taylor of the Hill End staff whenever he could play. Gray, greatly assisted by McGrigor behind the stumps, obtained a fair number of wickets, and Gallimore and J. K. Mason both proved capable of returning good averages. Hicks's two overs during the season included one maiden.

As for our fielding—well, the outfield was inclined to be rough, and there were some very hot days.

Finally, a long list of thanks. To Dr. Hayward, Dr. Rait-Smith and Mr. O'Connell for enhancing the tone of the team on several occasions, to the latter also for some delightful reminiscences; to Dr. Roberts for looking after the financial aspect and for permission to use the Hill End equipment; to Mr. G. B. Goodchild for his never-failing fund of advice; to the staff of a certain hotel for putting up with us so frequently and for such long periods of time; and last, but by no means least, to those ladies who provided us with the support during, and the encouragement or sympathy after, the matches we played, that enabled us to enjoy to the full a very pleasant season. (Nursing journals: please copy.)

A. J. G.

### FAREWELL TO TENNIS

Bludgeoned into producing a space-filling article, the Secretary of the Hill End Bart's Club Tennis Section (Inc.) takes this opportunity of thanking himself. He has worked very hard at comforting himself for what he has not done.

He has mended as few holes in the net as possible; he has acquired as many lost balls as

possible. He forgot to provide tea for his tennis team at the only match he arranged for them. He reduced paper consumption by 75% by posting one weekly court booking list per month. This happily produced a most excellent amount of general recriminations. The tournament would have been memorable had it been held. Fortunately he was able to evade this issue also. He apologises for his inability to fail to get the window catch of the pavilion mended but understands that others more fortunate than he were not so easily defeated.

On the whole he regards his period of office as one of almost unbroken success. Only his total absence could have improved things. As this is practically certain to obtain next year he presumes that his fellow members will wish him to stand for a second term. He informs them in advance of his readiness to do so.

D. E. R. K.

### MORE RUGGER

There are a number of keen Rugger players at Hill End; and early in September anxious enquiries about fixtures caused a lazy Secretary to borrow postage stamps and write some letters, seeking opposition.

Our first game was against St. Albans School, and their quickness, training and co-operation overcame our advantage in weight and strength. Despite the presence of Durham, the Isle of Wight International, our attack lacked thrust, and at half-time the School led (8-0).

By this time a pair of football boots had been commandeered for our full-back, who was able to discard his gym shoes. Our forwards, with Moffat, Castleden and Mason to the fore, attacked strongly, and we scored two unconverted tries. We were unable to maintain this pressure, and a final score by the School made the result (13-6) in their favour.

An enjoyable game with the Royal Corps of Signals gave the whole side plenty of running about, and at the end we were in the unfortunate position of being uncertain whether we had scored thirty or thirty-two points.

Fiern brought a team over on October 30th and we beat them (17-3). As so often happens in friendly games, two players were injured and had to go off.

Our last game was against Queen Elizabeth's School, Barnet, and we won (14-11). Owing to the possibility of air raids, the referee was not allowed to use a whistle, and so he controlled the game by means of a hunting horn. Ian Smith, on the wing, emulated his famous namesake and scored two tries, and Kingdom scored one. Moffat, West and Payne were prominent in a hard-working pack.

H. J. C. L'E.

### MORE SOCCER

A Soccer Club is again active at Hill End. Members of the Club, which so far is running only one team, are the Students, the Male Nurses and the R.A.M.C. detachment. We have an attractive fixture list for the rest of the season, though so far only a few games have been played. We are hoping to arrange matches with other hospitals in the Sector. Matches to be played during November include fixtures with Hatfield House Hospital, the R.A. at St. Albans and the local A.R.P. Service.

D. G. L.

**AND HOCKEY AGAIN**

The Hill End season has started in quite promising fashion. The side looks like settling down into quite a promising combination. In addition to the regular Saturday matches a mixed game has become a weekly feature.

G. E. H.

**Oct. 12th v. Broxbourne. Away. Lost 1-2.**

Played at Broxbourne, this was very enjoyable and closely contested. Our forwards showed a beginning of season lack of cohesion, which was emphasized by the individual brilliance in defence of Marrett and Ellis. Broxbourne scored early, but Baldwyn soon replied for Hill End, and the final goal came, rather unluckily for us, late in the second half.

G. E. Hicks; R. E. Ellis, T. A. Grimson; A. G. E. Pearce, H. R. Marrett, P. Oliver; A. P. Baldwyn, C. W. S. F. Manning, A. H. W. Brenan, H. H. Bental, J. Newcombe.

**Oct. 19th v. St. Albans. Away. Won 2-1.**

This was a very keen and even game played under very pleasant conditions and resulted in a win for Hill End in the last minute. Hill End secured an early lead through Brenan which they maintained until ten minutes from the end, when St. Albans replied. A prolonged scramble in the St. Albans' half then terminated with an excellent goal from Gallimore in the last minute.

G. E. Hicks, R. L. Ellis, R. M. Mason; J. O.

Gallimore, H. R. Marrett, A. G. E. Pearce; A. P. Baldwyn, C. W. S. F. Manning, A. H. W. Brenan, H. H. Bental, J. Newcombe.

**Oct. 26th v. Vauxhall Motors. Home. Drawn 2-2.**

This was played with a very depleted side, but allowing this, the score ought to have been better. We scored once in the first half and were within their "twenty-five" almost the whole time. In the second half they broke through twice and scored. Still we pressed but were able to find their net but once more. Baldwyn scored both our goals, and was responsible for some very sound attacks.

T. A. Grimson, R. E. Ellis, A. Goodall; J. O. Gallimore; A. G. E. Pearce, R. Freeman; J. Newcombe, G. W. S. F. Manning, H. H. Bental, R. Bower, A. P. Baldwyn.

**Nov. 2nd v. Luton. Away. Won 4-0.**

A match played on a very wet afternoon, but on an excellent pitch and resulting in a very good game. Hill End took the initiative from the whistle and Bental scored in the first few minutes. He followed this with a second shortly afterwards and a third early in the second half. A fourth goal was later added by Brenan. Although the play was by no means all in their half, the Luton attack did not combine well and never looked dangerous.

G. E. Hicks; T. A. Grimson, P. Oliver; J. O. Gallimore, J. Bullough, C. W. S. F. Manning; A. P. Baldwyn, S. R. Hewitt, A. H. W. Brenan, H. H. Bental, J. Newcombe.

**SPORTS NEWS**

Mr. G. H. Wells-Cole has been appointed Sports Editor.

\* \* \*

War-time travelling is making difficulties in Hospital Sport, but it speaks well for the enthusiasm of the various Clubs that fixtures are being fulfilled every week. Late trains means sometimes returning after the barrage and the bombs have begun, and though there have been no narrow escapes reported so far it is not an altogether pleasant experience to be out after dark nowadays.

The Rugby Club have played the most matches so far; but in spite of having some very good players in their side they do not seem to have settled down as a team yet.

The Soccer Club have a strong side and have won all their matches up to date. The Hockey Club have had some difficulty in raising a side, or in finding opponents who can do so, but they have also done well.

The best of luck to all of them in the coming season.

**RUGGER CLUB**

This season the Hospital is running four teams only per Saturday, including one at Cambridge. At the end of last season we had difficulty in turning out two clinical sides. Before the war we used to have six or seven sides out every Saturday. The numbers of the Hospital have not diminished and surely this deficiency cannot be entirely due to the war. Of the fifty odd men who came up to Hill End in October only four put their names down to play Rugger, and of those, three were from

Cambridge. Last year a member of the A XV actually cycled down to play at Chislehurst all the way from St. Albans, because he was "broke." It is a pity one cannot cultivate such keenness and inoculate it into some of those who take their Saturday afternoon exercise in the one-and-six-pennies. Admittedly, the First XV results have not been an advertisement to Bart's Rugger, but on several occasions the score was not truly representative of the run of the game, and that is not merely a biased opinion. We should have beaten both Sandhurst and Bordon Garrison, but carelessness in tackling in the second half let us down. Our forwards have been playing very well indeed and it must be very disappointing for them to see the centres repeatedly letting through their men. Our chief form of attack is the forward rush with the whole pack up on the ball.

We all regret not playing on our own ground at Chislehurst, but transport difficulties and the distance from the sector hospitals obliged us to abandon it temporarily and rent the Mill Hill School ground. Our return will be just one more thing to look forward to when peace returns.

J. P. S.

**HOCKEY CLUB. 1940/41.**

**v. Westminster Hospital on Nov. 9th. Won 4-2.**

In their second match of the season Bart's Started off in good style and soon began to worry our opponents' defence. In spite of a penalty corner and several chances our forwards were not able to score; later on, however, the forwards attacked strongly and Harrison made no mistake with a good shot. Our opponents retaliated and



the score was 1-1 at half-time. In the early part of the second half Bart's went quickly ahead by the addition of two goals by J. L. Fison. Then the play became rather scrappy on both sides,

but our forwards scored again through J. L. Fison after a good forward movement. Westminster then scored their second goal and no-side came with a 4-2 win for the Hospital.

### EXAMINATION RESULTS FINAL CONJOINT OCTOBER, 1940

#### **PATHOLOGY**

Adlam, J. P.  
Walters, F. J. H.  
Bromley, W. A.  
Harvey, R. J.  
Bell, R. C.  
Howells, G.  
Weber, G. N.  
Hanford, F. W.  
Whitmore, G. L.  
Sadler, J. A.  
Anderson, A. W.  
Bennett, D. H.  
Nabi, R. A.  
Holmes-Smith, A.  
Cooper, C. F.  
Packer, F. H.  
Andrews, R. H.  
Harland, D. H. C.  
Lewis, B.  
Tomback, S.  
Connolly, R. C.  
Cohen, L.  
Barclay, P. S.  
Harrison, K. O.  
Klidjian, A.

#### **MEDICINE**

Russell-Smith, R. S.  
Sandilands, J. A. J.  
Khan, H. H.  
Adlam, J. P.  
Walters, F. J. H.  
Thompson, M. R.  
Husband, A. D.  
Pickering, G. H.  
Discombe, G.  
Maples, A.  
Carroll, C. R. K.  
Hanford, F. W.  
Thomas, E. G.  
Allen, W. H. E.  
Johnstone, J. S.  
Poolman, J. F.  
Watson, P. C.  
Rowntree, T. W.  
Barasi, F.  
Holmes-Smith, A.  
Morgan, J. E.  
Miller, P. J.  
Atkinson, W. J.  
Phillips, H. T.  
Diplomas were conferred on the following:—  
Barclay, P. S.  
Maples, A.  
Allen, W. H. E.  
Fawkes, M. A.  
Cohen, R. H. L.  
Russell-Smith, R. S.  
Rowntree, T. W.  
Husband, A. D.  
Spafford, A. J. H.

Helm, H. G.  
Lyon, W. C.  
Tomback, S.  
Evans, J. W. G.  
Hershman, M.  
O'Carroll, C. B.  
**SURGERY**  
Phillips, H. T.  
Coupland, H. G.  
Bell, C. J. A.  
Stansfeld, J. M.  
Silcock, A. R.  
McNair, T. E. L. J.  
Shephard, E.  
Craike, W. H.  
Spafford, A. J. H.  
Medvei, V. C.  
Thompson, J. H.  
Boyle, A. C.  
Harris, D. V.  
White, M. W. L.  
Meade, F. B.  
Packer, F. H.  
Fawkes, M. A.  
Manson, C. N. S.  
Wilson, H. L. J.

#### **MIDWIFERY**

Russell-Smith, R. S.  
Cooper, C. F.  
McNair, T. E. L. J.  
Galvan, R. M.  
Fawkes, M. A.  
Webb, E. J. E.  
Carroll, C. R. K.  
Connolly, R. C.  
McLean, T. M.  
Pezeshgi, H.  
Mariani, G.  
Shah, J.  
Thomas, E. G.  
Sadler, J. A.  
Maconochie, A. D. A.  
Shephard, E.  
Hall, T. E.  
Robertson, J. A.  
Whitmore, G. L.  
Pitt, N. M. F. P.  
Thompson, J. H.  
Boyle, A. C.  
Cohen, R. H. L.  
Sinha, K. N.  
Discombe, G.  
Thomas, E. G.  
Poolman, J. F.  
White, M. W. L.  
Phillips, H. T.  
Morgan, J. E.  
Shephard, E.  
Silcock, A. R.

### L.M.S.S.A.—AUGUST, 1940

Bachmann, P. A.

### A.F.C. RESULTS

Oct. 12th.

v. Charing Cross Hospital at Colindale. Won 3-2.

Nov. 6th.

v. Imperial College of Science at Chislehurst.  
Won 6-0.

Nov. 13th.

v. Forest School at Snarebrook. Won 5-0.

### BIRTHS

CLARKE.—On October 29th, 1940, at the North Oxford Nursing Home, to Helen (née Hatt), wife of Dr. E. P. Clarke—a daughter.

JENNINGS.—On November 3rd, 1940, at Kirkland, Christchurch Road, Reading, to Margaret (née Douglas), wife of Dr. L. M. Jennings—a daughter.

TUCKWELL.—On November 2nd, 1940, at Berthorpe, Puttenham, to Phyllis Courthope, wife of E. G. Tuckwell, F.R.C.S.—a daughter.

### MARRIAGES

BEHRMAN—ENGELBERT.—On November 7th, 1940, quietly, Dr. Simon Behrman, of 33, Harley Street, W.1, to Doris Engelbert, of 8, Dorset Square, N.W.1.

EAST—THATCHER.—On October 24th, 1940, at Broadwater Church, Cecil John East, M.B., B.S., son of Mr. and Mrs. East, of St. Leonards-on-Sea, to Gwladys Elizabeth Griffith, daughter of the late Rev. W. Romaine Thatcher, M.A., and Mrs. Thatcher, of Worthing.

GRAHAM—RUSSELL.—On November 3rd, 1940, quietly, at St. Nicholas', Blundellsands, Dr. George Desmond Graham, third son of the late W. S. Graham, of Carlisle, and Mrs. Graham, of Y-ty-gwyn, Morfa Nevins, to Evelyn Ann, youngest daughter of the Headmaster of Merchant Taylors', Crosby, and Mrs. C. F. Russell.

JACK—FIELD.—On November 2nd, 1940, quietly, at Weyhill, Hants, Alexander Hunter Jack to Margaret Dorothy Field.

MACONIE—JACKAMAN.—On November 12th, 1940, at Stoke Poges Church, Alan Cameron, only son of the late Mr. A. Maconie and Mrs. Maconie, of Hoylake, Cheshire, to Mary Kathleen, elder daughter of Mr. and Mrs. C. J. Jackaman, of Slough, Bucks.

### SILVER WEDDING

ACTON DAVIS—LLOYD.—On October 23rd, 1915, Kenneth James Acton Davis, F.R.C.S., M.Ch., second son of Mr. G. Acton Davis, of Julian Hill, Harrow, to Vera, younger daughter of Mr. E. Honorarius Lloyd, K.C., of 30, Collingham Gardens, London, W.

### DEATHS

CUDDON FLETCHER.—On October 31st, 1940, at Leicester, Angus Joseph Macnab Cuddon Fletcher.

FRANCIS.—On October 13th, 1940, very peacefully, at 32, Park Drive, Hastings, Alfred George Francis, O.B.E., F.S.A., F.R.C.S., aged 77.

HEWITT.—On October 25th, 1940, Surgeon Rear-Admiral David Walker Hewitt, C.B., C.M.G., F.R.C.S., dearly loved husband of Nora Hewitt.

MAYO.—On October 20th, 1940, at Hove, Herbert Reginald Mayo, M.B. Camb., second son of the late Dr. A. C. Mayo, J.P., of Great Yarmouth, aged 66.

RAMSAY.—On October 25th, 1940, at his residence, Tinkerfield, Dutton, Longridge, near Preston, Jeffrey Ramsay, O.B.E., M.D., F.R.C.P., the dearly loved husband of Alice Ramsay.

SCHOLBERG.—On October 14th, 1940, at Southgate, Lisvane, Cardiff, Harold Alfred Scholberg, M.B., D.P.H., dear husband of Anne, and second son of the late P. N. Scholberg, British Vice-Consul, Talit, Chile.



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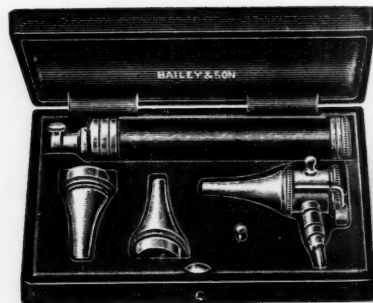
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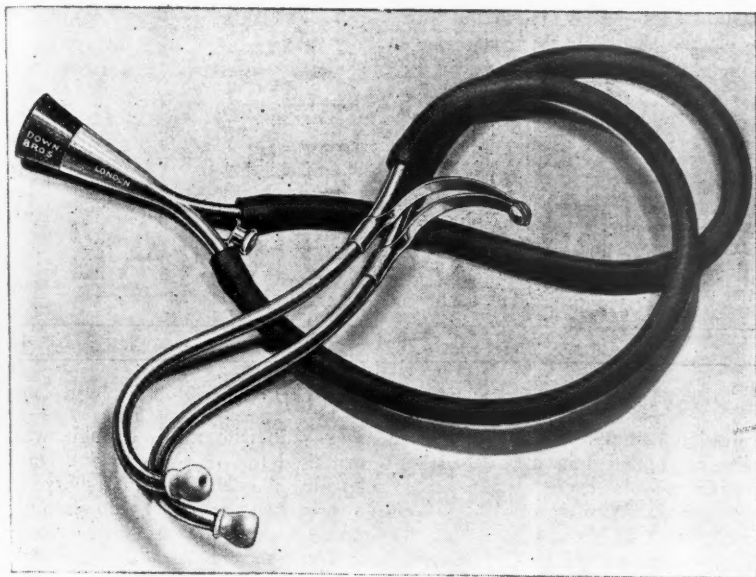
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